

REMARKS

Claims 1 and 24

The examiner rejected claims 1, 2, 6-8, 24, and 25 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,606,326 (“Herring”) in view of U.S. Patent No. 5,592,476 (“Calamvokis”).

Claim 1 recites a system comprising “... third circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port.”

The examiner contends that “**Herring does not explicitly disclose circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port.**¹” Applicants showed in the Response to the previous Office Action that not only does Herring not describe nor suggest this feature of claim 1, but Herring teaches away from this feature.²

Therefore, one of ordinary skill in the art reading Herring would not have motivation to look to another reference for “... circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port.” Nevertheless, Calamvokis fails to remedy the deficiencies of Herring.

Specifically, Applicants do not agree with the examiner’s contention that

One skilled in the art would have recognized the circuitry to enqueue the first portion and the second portion for transmission to a second port in the same order in which the first portion and the second portion were received at the first port, and would have applied Calamvokis et al.’s controller 33 in Herring’s processing element 15.³

Calamvokis teaches, regarding the controller:

¹ Office Action, Mail Date July 8, 2009, Page 4

² Response to Office Action of November 4, 2008, Pages 7 and 8

³ Office Action, Mail Date July 8, 2009, Page 5

N input ports 37 are serviced in strict order one cell at a time. When a cell comes in on one of the input ports the Fabric 30 writes the cell body into the Shared Cell Body Memory 31 at an address taken from the free address list memory 32. This address is also passed to the Controller 33, along with the header of the cell to which it relates. Because the input ports 37 are serviced in a fixed order, the Controller 33 can tell the source of the cell from the arrival time of the header.

The controller 33 stores and processes the headers and cell body addresses of incoming cells. It also makes decisions about which cell to send next on each output port 38 based on the queuing model and scheduling policies (to be described hereinafter). To send a cell the controller outputs the cell's header and the address at which the cell's body is stored. The fabric 30 reads the cell body out of the Shared Cell Body Memory 31, combines it with the header and sends the cell on an output port. As the output ports are also serviced in a fixed order, the destination of the cell is determined by the time at which the controller sends the header and address.⁴

The controller of Calamvokis identifies the source of a cell from an arrival time in a header corresponding to the cell. This functions because the N input ports of the fabric which passes the header of the cell to the controller are serviced in strict order one cell at a time. In Herring, however, such input ports operate in parallel, and nowhere does Herring teach that these input ports are serviced in strict order one cell at a time. One of ordinary skill in the art would not find it obvious, or even desirable, to apply the controller of Calamvokis in the processing element of Herring.

Herring and Calamvokis, together or in combination, neither describe nor render obvious “a system comprising...circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port,” as recited in claim 1. Claim 24 recites similar features to claim 1. Therefore, the rejection should be withdrawn.

The examiner rejected claims 3-5 and 9-13 under 35 U.S.C. § 103(a) as being unpatentable over Herring in view of Calamvokis and further in view of U.S. Patent No.6,493,754 (“Rosborough”).

Claims 3-5 and 9-13 depend from claim 1, and it has been shown supra that Herring in view of Calamvokis neither describes nor renders obvious “a system comprising...circuitry to

⁴ Calamvokis, Column 7, Line 48 – Column 8, Line 1

enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port,” as recited in claim 1. Rosborough was introduced by the examiner to cover the feature of program threads and therefore fails to remedy the deficiencies of Herring in view of Calamvokis.

Herring, Calamvokis, and Rosborough, alone or in combination, neither describe nor render obvious a system comprising circuitry to enqueue the first portion and the second portion of a network packet for transmission to the second port in the same order in which the first portion and the second portion were received at the first port, as recited in claim 1, from which claims 3-5 and 9-13 depend. Accordingly, the rejection should be withdrawn.

Claim 14

The examiner rejected claims 14, 15, and 17-19 under 35 U.S.C. § 103(a) as being unpatentable over Herring in view of U.S. Patent No. 5,592,476 (“Boucher”) and further in view of Calamvokis.

Claim 14 recites a communication system comprising a sequencer to poll the one or more status flags and place the one or more status flags to the one or more registers over the bus, wherein the communication system is capable of processing one or more packets of data, and wherein the communication system is capable of maintaining an intra-packet order and an inter-packet order for the one or more ports.

The arguments presented *supra* also show that Herring in view of Calamvokis neither describes nor renders obvious “a communication system comprising a sequencer to poll the one or more status flags and place the one or more status flags to the one or more registers over the bus, wherein the communication system is capable of processing one or more packets of data, and wherein the communication system is capable of maintaining an intra-packet order and an inter-packet order for the one or more ports,” as recited in claim 14.

Further, Applicants argued in the previous response that Boucher teaches away from a communication system capable of maintaining an intra-packet order and an inter-packet order⁵. The examiner has not addressed this point in the Office Action, for which Applicants maintain their argument.

Herring, Calamvokis, and Boucher, alone or in combination, neither describe nor render obvious a communication system comprising a sequencer to poll the one or more status flags and place the one or more status flags to the one or more registers over the bus, wherein the communication system is capable of processing one or more packets of data, and wherein the communication system is capable of maintaining an intra-packet order and an inter-packet order for the one or more ports, as recited in claim 14. Accordingly, the rejection should be withdrawn.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

In view of the foregoing, applicant respectfully submits that the application is in condition for allowance and such action is respectfully requested at the examiner's earliest convenience.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

⁵ Response to Office Action of November 4, 2008, Page 9

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No fees are due at this time. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket no. 10559-0132002.

Respectfully submitted,

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